

REMARKS

Applicant has thoroughly considered the Examiner's remarks in the Office action of June 29, 2006 and respectfully requests reconsideration of claims 1-7, 9, 11-13, 15, 17, and 19-20. By this Amendment E, claims 1, 4, 6, 9, and 12-13 have been amended, and claims 10 and 18 have been canceled.

Claim 1 has been amended to include, among other things, the subject matter of claim 10, and claim 6 has been amended to include, among other things, the subject matter of claim 18.

As discussed in detail below, the pending claims recite several features that are not shown in the cited prior art. For example, claims 1, 6, 12 include subject matter directed to pointing and peaking an antenna of a portable webcasting system. Claims 9, 13, and 17 recite, among other limitations, sweeping a range of directions to locate satellites and selecting the satellite with the strongest signal. Claims 1, 4 and 6 include subject matter directed to setting a center frequency and data rate (i.e., bandwidth) in response to input from a teleport. And claims 11, 15, and 19 include subject matter directed to adjusting the power of a transmission signal sent from a first location by a portable webcasting system in response to input from a teleport.

Claim Objections

The Examiner objected to claim 6 because it recited, "receiving the coordinate signal at an antenna, wherein the antenna directs the transmission signal according to the received coordinate signal." As suggested by the Examiner,

claim 6 has been amended to separate the antenna pointing mechanism (i.e., positioning motors) from the antenna. To this end, claim 6 as amended recites, "...receiving the motor command at an antenna positioning motor, wherein the antenna positioning motor is responsive to the motor command for pointing an antenna such that the antenna pointed by the antenna pointing motor directs the satellite transmission signal in the estimated direction of the communication satellite."

**Claim Rejections Under 35 U.S.C. § 112 - Written
Description**

Applicant respectfully requests reconsideration of the rejection under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement as set forth in pages 2-3 of the Office action. As filed, the specification of the present application describes the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventors, at the time the application was filed, had possession of the invention as claimed.

Claims 1, 9, 12, and 13 stand rejected under the written description requirement of 35 U.S.C. § 112 for the limitation "modulating the coordinate signal". Applicant has amended the claims to more clearly set forth the invention. By this Amendment E, the claims recite providing motor commands to a motor for positioning the antenna to point in an estimated direction of the satellite and to optimize reception at that satellite. Support for these changes can be found at paragraphs [0074], [0078],

and [0079] of the application as filed and in FIG. 2. In part, the application recites, "Based on the difference between the desired antenna position and the current pointing information, router computer 202 provides motor commands to one or more positioning motors 234 coupled to antenna 224." See paragraph [0074].

Claims 4, 10, and 18 stand rejected under the written description requirement of 35 U.S.C. § 112 for being directed to a system comprising a plurality of satellites. Claims 4, 10, and 18 as amended recite, "a satellite."

Claim 17 stands rejected under the written description requirement of 35 U.S.C. § 112 for being directed to a system comprising a plurality of satellites. Claim 17 is properly supported as it stands. See, for example, the application at paragraph [0079], which recites in part, "At step 316, router computer 202 drives antenna 224 such that it sweeps through its full azimuth range." Moreover, paragraph [0074] describes identifying signal peaks that are considered to be potential satellite signals, positioning the antenna on each detected signal peak, and attempting to lock onto a desired satellite.

The Examiner does not attempt to set forth a prima facie case for a written description rejection of claims 2-3, 5, 11, or 15. The patent laws require that the Examiner either set forth sufficient reasons and evidence, by a preponderance of the evidence, **why** a person skilled in the art would not have recognized that the inventor was in possession of the invention as claimed at the time the application was filed, or withdraw the written description rejection. In this instance, the Examiner has merely made a bare, conclusory statement that these claims fail to

satisfy the written description requirement. Therefore, Applicant requests that the Examiner withdraw the rejection of these claims based on the written description requirement.

Claim Rejections Under 35 U.S.C. § 112 - Enablement

Applicant also respectfully requests reconsideration of the rejection under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement requirement as set forth on page 3 of the Office action.

Claims 4, 10, and 18 as amended recite "a satellite" instead of "one or more satellites" (i.e., "a plurality of satellites" as described by the Examiner). Applicant therefore submits that these claims as amended are enabled by the specification as filed. Additionally, this subject matter is described in the specification at, for example, paragraph [0034].

Claims 5, 12, 13, and 15 also stand rejected as failing to comply with the enablement requirement, however, the Office Action states no factual basis for the rejection of these claims. As a matter of Patent Office practice, the Examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993) (examiner **must** provide a **reasonable explanation** as to why the scope of protection provided by a claim is not adequately enabled by the disclosure). A specification disclosure containing a teaching of the manner and process of making and using an invention in terms that correspond in scope to those used in describing and defining the subject matter sought to be

patented must be taken as being in compliance with the enablement requirement of 35 U.S.C. § 112, first paragraph, unless there is a reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support. Assuming that sufficient reason for such doubt exists, a rejection for failure to teach how to make and/or use will be proper on that basis. *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). As stated by the court, "it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to **back up assertions of its own with acceptable evidence or reasoning** which is inconsistent with the contested statement. Otherwise, there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure." 439 F.2d at 224, 169 USPQ at 370. See MPEP § 2164.04.

As explained above with respect to the written description requirement of 35 U.S.C. § 112, antenna pointing and peaking, setting a bandwidth in response to input from a teleport, and adjusting the power of a transmission signal in response to input from a teleport are disclosed in the specification. For example, setting a bandwidth for a transmission signal in response to input from a teleport, as recited in amended claim 4 and claims 10 and 18, is described in the specification at paragraphs [0033] and [0034]. Paragraph [0034] also describes adjusting the power of a transmission signal in response to input from a teleport as in claims 11, 15, and 19.

In fact, Applicant has even gone so far as to provide extensive details for implementing a commercial embodiment of the invention in the Appendix beginning at paragraph [0089].

The conclusory assertions in the Office action: "The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains... to make and/or use the invention," and, "The specification does not provide enough details about the structure and operation of the elements associated with the above identified claimed features to enable one skilled in the art to make and use the invention without undue experimentation," do not provide the required basis sufficient to raise doubt regarding the truth of any statement in the specification, nor do such statements constitute acceptable evidence or reasoning that is inconsistent with the scope of the pending claims.

Additionally, according to *In re Bowen*, 492 F.2d 859, 862-63, 181 USPQ 48, 51 (CCPA 1974), the minimal requirement is for the examiner to give reasons for the uncertainty of the enablement. This standard is applicable even when there is no evidence in the record of operability without undue experimentation beyond the disclosed embodiments. See also *In re Brana*, 51 F.3d 1560, 1566, 34 USPQ2d 1436, 1441 (Fed. Cir. 1995) (citing *In re Bundy*, 642 F.2d 430, 433, 209 USPQ 48, 51 (CCPA 1981)). In the written enablement rejection, the language should focus on those factors, reasons, and evidence that lead the examiner to conclude that the specification fails to teach how to make and use the claimed invention without undue experimentation. This can be done by making specific

findings of fact, supported by the evidence, and then drawing conclusions based on these findings of fact. The examiner should specifically identify what information is missing and **why** one skilled in the art could not supply the information without undue experimentation. See MPEP § 2164.06(a). References should be supplied if possible to support a *prima facie* case of lack of enablement, but are not always required. *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). However, **specific technical reasons are always required**. See MPEP § 2164.04.

The rejection based on the enablement requirement of 35 U.S.C. § 112, first paragraph, is deficient because the Examiner has not met the minimum requirement of giving reasons for the uncertainty of enablement. The Examiner has not specifically identified information missing from the disclosure. At page 3 of the Office action, the Examiner merely listed aspects of some of the claims, but failed to specifically identify information necessary for one skilled in the art to make and use the invention that is missing from the specification. The Examiner has not explained why one skilled in the art could not supply any information that may be missing without undue experimentation. The Examiner made no findings of fact and showed no supporting evidence in the Office action. The Office action fails to advance any adequate reasons to establish that a person skilled in the art could not practice optimizing reception of the transmission signal at the satellite, a portable satellite uplink responsive to a teleport for setting a transmitter center frequency and data rate, said center frequency and data rate defining a bandwidth for transmissions to a particular satellite to

manage transmissions from a plurality of portable uplinks to one or more satellites, and a portable satellite uplink that is responsive to a teleport for adjusting the power with which the satellite transmission signal is transmitted without undue experimentation.

Those skilled in the art are well-acquainted with writing software code and constructing electronic devices such that given the information at paragraphs [0033]-[0034] and the Appendix, one could readily apply their level of understanding to successfully implement the outlined process for setting a bandwidth in response to input from a teleport. Nothing in the Office action refutes the disclosure of the claimed setting a bandwidth in response to input from a teleport.

Those skilled in the art also are well-acquainted with writing software code and constructing electronic devices such that given the information at paragraph [0034] and the Appendix, one could readily apply their level of understanding to successfully implement the outlined adjusting the power of a transmission signal in response to input from a teleport. Nothing in the Office action refutes the disclosure of adjusting the power of a transmission signal in response to input from a teleport.

Thus, the rejection under 35 U.S.C. § 112, first paragraph regarding enablement is improper and the patent laws require that the Examiner either provide an explanation as to **why** the Examiner doubts the truth or accuracy of statements in the supporting disclosure and back up any assertions with evidence or reasoning which is inconsistent with any contested statement, specifically identify missing information and give evidence as to why

one skilled in the art could not supply the missing information, or withdraw the rejection.

Finality of Office Action

Applicant notes that an Office action responding to this Amendment E may not be made final unless the improper written description and enablement rejections are withdrawn. "[T]he first Office action on the merits should present the best case with all the relevant reasons, issues, and evidence so that all such rejections can be withdrawn if applicant provides appropriate convincing arguments and/or evidence in rebuttal. Providing the best case in the first Office action will also allow the second Office action to be made final should applicant fail to provide appropriate convincing arguments and/or evidence. Citing new references and/or expanding arguments in a second Office action could prevent that Office action from being made final." See MPEP § 2164.04. If the examiner introduces a new ground of rejection that is neither necessitated by Applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c), then the rejection should not be made final. See MPEP 706.07(a).

The Examiner failed to properly present a *prima facie* case for both a written description rejection and an enablement rejection, and therefore has not provided the best case in the current Office action. Therefore, a further rejection on this basis would be a new or expanded ground of rejection, preventing the subsequent Office action from being made final. Applicant submits that any

Office action responding to this Amendment E must be non-final if the Examiner wishes to maintain a rejection of based on the written description or enablement requirements of 35 U.S.C. § 112, first paragraph with respect to any of claims 2-3, 5, 11-13, or 15.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Toporek (US 6, 584,083) in view of Haldeman (US 6,801,576) in further view of McNabb (US 6,016,120). Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Toporek (US 6,584,083) in view of Haldeman (US 6,801,576) in further view of Pezzlo (US 6,049,561). Applicant submits that the cited references fail to teach or suggest each and every element of the claims as amended.

The Examiner cites Pezzlo as disclosing "a portable uplink router responsive to a teleport for setting a transmitter center frequency, power and data rate, said center frequency and data rate defining a bandwidth for transmissions from a plurality of portable satellite uplink to a satellite (satellite system shown on FIG. 1 and 4:19-63 wherein a teleport/Network control Terminal 12n controls the other network portable 3:10-20 Terminal Modems 12a-12n-1 including their bandwidth, center frequencies and power)." See Office Action at pages 10 and 14. Pezzlo fails to teach defining a data rate and setting the power with which an uplink transmits. Pezzlo merely teaches a pseudo random frequency hopping system for secure communications (see Pezzlo generally, at Abstract and Col. 4, Lines 9-18). The data rate of each Network Terminal

Modem is predetermined; only the carrier frequency changes. The center frequency is not altered in accordance with an internal program and a Bandwidth Occupancy Plan (see Pezzlo at Col. 2, Lines 8-49 and Col. 4, Lines 4-18).

In contrast, the present invention changes bandwidth assignments as little as possible to avoid service interruption (see Application at paragraph [0034]). The data rate and center frequency of each uplink is determined as a function of the activities being performed by the uplink, activities being performed by other uplinks, and the data rate of those activities (see Application at paragraph [0034]). Thus, the data rates of the uplinks in the present invention is not predetermined (as taught by Pezzlo), but assigned on a need basis by the teleport.

To this end, claim 1 as amended recites, "wherein the portable satellite uplink is responsive to a teleport for setting a transmitter center frequency and data rate, said center frequency and data rate defining a bandwidth for transmissions to a satellite to manage transmissions from a plurality of portable satellite uplinks to the satellite." Claim 4 recites, "a portable uplink router at the first location, said portable uplink router being responsive to a teleport for setting a transmitter center frequency and data rate, said center frequency and data rate defining a bandwidth for transmissions to a particular satellite to manage transmissions from a plurality of portable satellite uplinks to the satellite." Claim 6 as amended recites, "setting, in response to input from a teleport, a transmitter center frequency and data rate, said center frequency and data rate comprising a bandwidth for

transmissions to a satellite to manage transmissions from a plurality of portable satellite uplinks to the satellite."

At least in part because the cited references, whether considered separately or together, fail to teach or suggest setting transmitter center frequency, power, and data rate as set forth by Applicant, claims 1, 4, and 6 are believed to be allowable.

Claims 11 and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Toporek in view of Haldeman in view of McNabb in further view of Pezzlo. The Examiner relies on Pezzlo as teaching adjusting the transmitter power level of a Network Terminal Modem. The transmitters of Pezzlo have a predetermined (i.e., not adjustable) transmission power level (see Pezzlo at Col. 4, Lines 35-41). The power of a transmitter is therefore not adjustable by System Planning Computer.

In contrast, the present invention teaches adjusting the transmission power of a portable uplink in response to instructions from a teleport in order to maximize reception of the transmitted signal at a satellite (see Application at paragraph [0034]). To this end, claim 11 recites, "wherein the portable satellite uplink adjusts the power with which the satellite transmission signal is transmitted in response to input from a teleport." Claim 15 recites, "wherein the webcasting system adjusts the power with which the satellite transmission signal is transmitted in response to input from a teleport." Claim 19 recites, "adjusting the power with which the satellite transmission signal is transmitted in response to input from a teleport." Therefore, the rejection of these claims under 35 U.S.C. § 103 should be withdrawn.

Claims 9, 13, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Toporek in view of Haldeman in view of McNabb in view of Pezzlo in further view of Ma (US 4,801,940). The Examiner does not assert that any of the five references teaches selecting a satellite having the best measured signal strength and optimizing reception of a transmission signal at the selected satellite as claimed by the present invention. Further, the Examiner does not take official notice that this is known in the art. Applicant therefore submits that the Examiner must either produce a reference that teaches this method as claimed or allow the claims as presented.

Official Notice

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Toporek in view of Haldeman and Pezzlo in further view of McNabb. Additionally, the Examiner asserts that the claimed method of measuring signal strength of the communication link established with a satellite and optimizing reception of a transmission signal at the satellite by adjusting the antenna direction is well known in the art and takes official notice. Applicant requests that the Examiner either produce a reference or combination of references showing that each and every element of the claimed method is well known in the art as combined by Applicant or allow the claim. Moreover, the finality of the Office action must be removed because the Examiner has introduced a new ground of rejection that was neither necessitated by Applicant's amendment of the claims nor based on information submitted

in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c). See MPEP 706.07(a). In this instance, the Examiner had ample opportunity to take official notice and to locate a suitable prior art reference earlier in the prosecution. To do so now at this late date severely prejudices Applicant and his ability to efficiently and judiciously prosecute the application.

Conclusion

In view of the foregoing, Applicant submits that independent claims 1, 4, and 6 are allowable over the cited art. The dependent claims also contain patentable subject matter as explained above. Moreover, claims 2-3, 5, 7, 9, 11-13, 15, 17, and 19-20 depend from claims 1, 4, and 6 and are believed to be allowable for at least the same reasons as the independent claims from which they depend.

It is felt that a full and complete response has been made to the Office action and Applicant respectfully submits that pending claims 1-7, 9, 11-13, 15, 17, and 19-20 are allowable over the cited art and that the subject application is now in condition for allowance.

The fact that Applicant may not have specifically traversed any particular assertion by the Examiner should not be construed as indicating Applicant's agreement therewith.

Applicant does not believe that a fee is due in connection with this response. If, however, the Commissioner determines that a fee is due, he is authorized to charge Deposit Account No. 19-1345.

Respectfully submitted,

/Robert M. Bain/

Robert M. Bain, Reg. No. 36,736
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

RMB/MAP/lav(cjl)